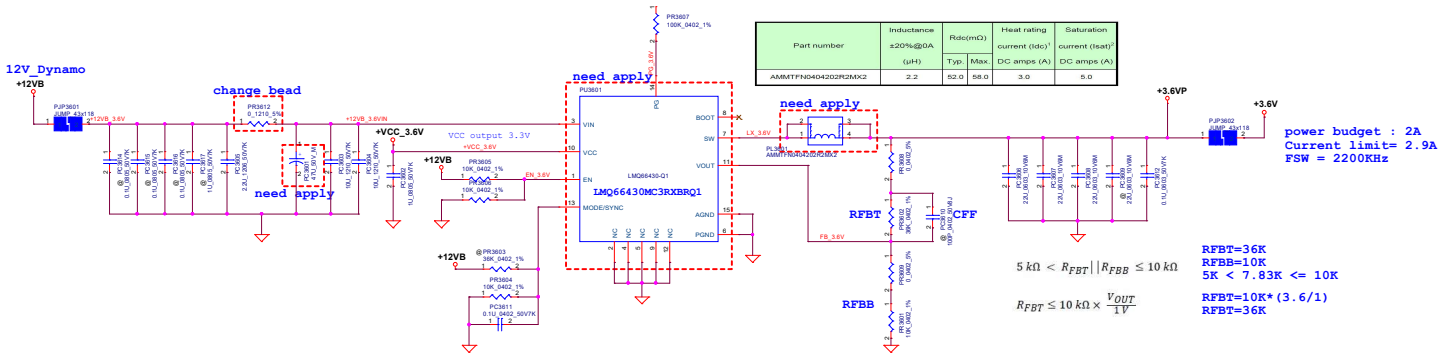
Orderable Part Number [1] [2]	Output Current	Output Voltage	External Sync	F_{SW}	Internal Capacitors	Spread Spectrum
LMQ66430MC3RXBRQ1	3 A	3.3-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 2.2 MHz	Yes	Yes
LMQ66430MC5RXBRQ1[3]	3 A	5-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 2.2 MHz	Yes	Yes
LMQ66420MC3RXBRQ1[3]	2 A	3.3-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 2.2 MHz	Yes	Yes
LMQ66420MC5RXBRQ1[3]	2 A	5-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 2.2 MHz	Yes	Yes
LMQ66420MA3RXBRQ1	2 A	3.3-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 400 kHz	Yes	Yes
LMQ66410MC3RXBRQ1[3]	1 A	3.3-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 2.2 MHz	Yes	Yes
LMQ66410MC5RXBRQ1	1 A	5-V Fixed / Adjustable	Yes (PFM / FPWM Selectable)	Fixed 2.2 MHz	Yes	Yes

(1) For more information on device orderable part numbers, see *Device Nomenclature*.
(2) For other variant options, please contact TI.
(3) Preview.



Part number	Inductance ±20%@0A (µH)	Rdc(mΩ) Typ.	Rdc(mΩ) Max.	Heat rating current (Idc)[1] DC amps (A)	Saturation current (Isat)[2] DC amps (A)
AMMTFN0404202R2MX2	2.2	52.0	58.0	3.0	5.0

$5\,k\Omega < R_{FBT} || R_{FBB} \le 10\,k\Omega$

$R_{FBT} \le 10\,k\Omega \times \frac{V_{OUT}}{1V}$

Table 8-1. Pulse-Dependent Mode Selection Settings

Mode/Sync Input	Mode
> V_{MODE_H}	FPWM with spread spectrum factory setting
< V_{MODE_L}	Auto mode with spread spectrum factory setting
Synchronization Clock	SYNC mode

V_{MODE_L}	SYNC/MODE input voltage low level threshold		1	V
V_{MODE_H}	SYNC/MODE input voltage high level threshold		1.6	V

ENABLE (EN PIN)						
$V_{EN-WAKE}$	EN wakeup threshold		0.5	0.7	1	V
$V_{EN-VOUT}$	Precision enable rising threshold for V_{OUT}		1.16	1.23	1.3	V
$V_{EN-HYST}$	Enable hysteresis below $V_{EN-VOUT}$		0.3	0.35	0.4	V
I_{LKG-EN}	Enable pin input leakage current	$V_{EN} = V_{IN} = 13.5$ V		10		nA

In some cases, an input UVLO level different than that provided internal to the device is needed. This can be accomplished by using the circuit shown in Figure 9-2. The input voltage at which the device turns on is designated as V_{ON} while the turn-off voltage is V_{OFF}. First, a value for R_{ENB} is chosen in the range of 10 kΩ to 100 kΩ, then Equation 9 and Equation 10 are used to calculate R_{ENT} and V_{OFF}, respectively.

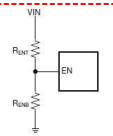
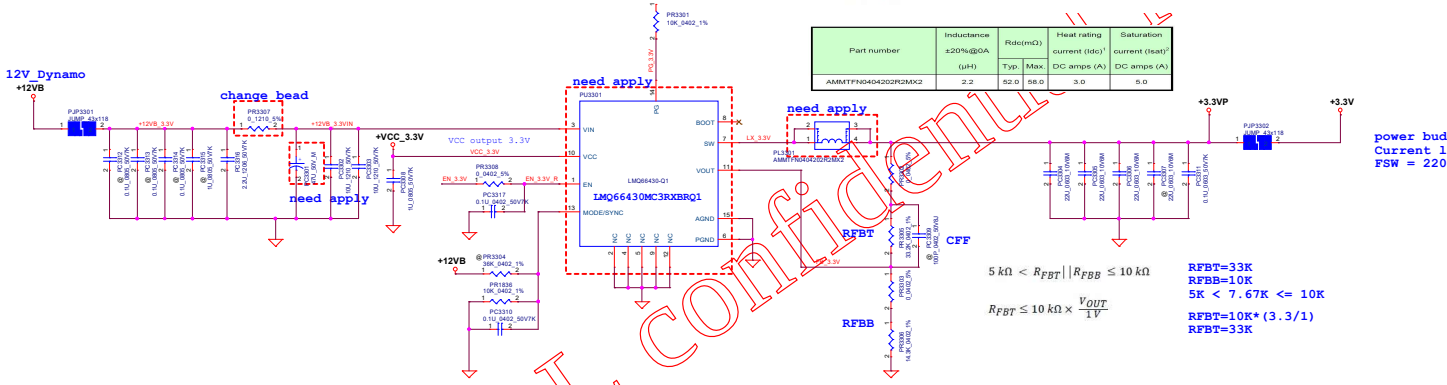


Figure 9-2. Setup for External UVLO Application

$$R_{ENT} = \left(\frac{V_{ON}}{V_{EN-VOUT}} - 1\right) \times R_{ENB} \quad (9)$$



Part number	Inductance ±20%@0A (µH)	Rdc(mΩ) Typ.	Rdc(mΩ) Max.	Heat rating current (Idc)[1] DC amps (A)	Saturation current (Isat)[2] DC amps (A)
AMMTFN0404202R2MX2	2.2	52.0	58.0	3.0	5.0

$5\,k\Omega < R_{FBT} || R_{FBB} \le 10\,k\Omega$

$R_{FBT} \le 10\,k\Omega \times \frac{V_{OUT}}{1V}$

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